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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,655	05/12/2006	Klaus Wolter	102167.57012US	5590

23911 7590 09/17/2010

CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER	
O'HARA, BRIAN M	

ART UNIT	PAPER NUMBER
3644	

MAIL DATE	DELIVERY MODE
09/17/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,655	WOLTER, KLAUS	
	Examiner	Art Unit	
	Brian M. O'Hara	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *46-68* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *46-68* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/29/2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 46-56, 59, 60, 62-68 are rejected under 35 U.S.C. 102(b) as being anticipated by Mednikow (US Patent 3,771,747 A).** Regarding independent **Claims 46 and 54**, Mednikow discloses an apparatus and method for assisting the landing and/or takeoff of a powered flying object, comprising: at least one, related to a landing and/or a takeoff area, stationary fluid current generator ("blowers" not shown; See Column 2, Line 30), which is designed to provide a fluid current (18) in order to introduce energy into a flying object (See Column 2, Lines 36-67), wherein the fluid current provided has a certain specific density (density of air), and detecting information on the flying object (via radar and electric eyes; See Column 3, Lines 33-34), and a substance supply unit (7) for enriching the provided fluid current (via 7) in response to the detected information (7 also can be manually operated; See Column 3, Line 25) by at least one substance (extinguishing fluids) of higher specific density to increase its deceleration effect and/or its acceleration effect (injecting extinguishing fluids into the currents 18 would inherently increase the deceleration effect of currents 18), respectively; and a control device ("interconnected computer", See Column 3 Lines 23-24) configured to detect information on the flying object and configured to cause the

substance supply unit to enrich the provided fluid current by the at least one additional substance in response to the detected information.

3. Regarding **Claims 47-53,** Mednikow discloses assisting the landing and/or takeoff of a powered flying object, wherein: the direction of the fluid current is adjusted depending on the situation (via baffles 16; also See Column 2, Lines 30-36); the value of at least one further physical parameter of the fluid current is adjusted depending on the situation comprising at least one of the following parameters: temperature of the fluid current, velocity ("increase the intensity", See Column 2, Lines 43-58) of the fluid current, homogeneity of the fluid current and laminarity rate of the fluid current; a fire-extinguishing agent (via 7) is introduced into the fluid current provided; the fluid current provided is a wind generated artificially from the existing atmosphere (blowers use atmospheric air); assist the landing of a flying object firstly a fluid current is provided, which is capable of decelerating the flying object, and then a fluid current is provided, which is capable of lowering the flying object from a hovering position onto the landing area (See Column 2, lines 43-67); to assist the takeoff of a flying object firstly a fluid current is provided, which is capable of lifting the flying object from the takeoff area to a hovering position and then a fluid current is provided, which is capable of accelerating the flying object in a desired direction (See Column 3, Lines 4-16).

4. Regarding **Claims 55, 56, 59, 60, 62-64** Mednikow discloses the apparatus as described above, wherein; the fluid current provided by the fluid current generator can be adjusted (via16 and the computer); the fluid current generator is designed so as to vary the value of at least one further physical parameter of the fluid current provided

("direction and intensities", i.e. velocity); a fire extinguishing agent supply unit (7); the at least on fluid current generator comprises at least one blower ("blower" See Column 2, Line 30); the at least one fluid current generator provides wind generated from the existing atmosphere (blowers use atmospheric air); a control device (computer with radar and electronic eyes) for determining the optimum value of at least one parameter of the fluid current being provided (18); and adjusting the direction of the flow (from horizontal to vertical; See Column 2, Lines 30-36).

5. Regarding **Claims 65-68**, Mednikow discloses a control device for determining (via the computer of manually) based on the detected information (obtained via radar or electronic eyes) whether enriching the provided fluid current is necessary in order to achieve a required deceleration effect or acceleration effect, wherein enriching the provided fluid current in response to the detected information by at least one substance of higher specific density comprises enriching the provided fluid current by at least one substance of higher specific density if determined to be necessary; and the information on the flying object comprises information on at least on of: a speed of the flying object (radar can detect speed).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. **Claims 57, 58, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mednikow as applied to claims 54 and 59 above, and further in view of Bertin et al. (US Patent 3,196,822 A).** Mednikow discloses an apparatus for assisting the takeoff and/or landing of a flying object as discussed above, but does not disclose a heating element for heating up the fluid current provided or a turbofan. Bertin discloses a heat exchanger (20) for use in heating up a fluid current in conjunction with a turbojet (34). At the time of invention, it would have been obvious to a person of ordinary skill in this art to provide a heating element in the landing/takeoff apparatus as disclosed in Mednikow in view of the teaching of Bertin. The motivation for doing so would have been to provide a fluid current that is more suitable for lifting a flying object, similar to a thermal column. Additionally, providing a cooling element for use when the aircraft is landing would also be obvious in view of the heating element of Bertin.

Response to Arguments

8. Applicant's arguments with respect to claims 46-64 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. O'Hara whose telephone number is (571)270-5224. The examiner can normally be reached on Monday thru Friday 10am - 5pm except the first Friday of every Bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy D. Collins can be reached on (571)272-6886. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy D. Collins/
Supervisory Patent Examiner, Art Unit 3644

/B. M. O./
Examiner, Art Unit 3644